WHAT IS CLAIMED IS:

1. A method of manufacturing a liquid crystal display device, comprising:

forming a plurality of thin film transistor unit cells on a thin film transistor unit cell region of a first mother substrate;

forming a plurality of color filter unit cells on a color filter unit cell region of a second mother substrate;

forming a liquid crystal aligning member on the thin film transistor unit cells and on the color filter unit cells;

assembling the first mother substrate and the second mother substrate to form an assembled substrate, such that the thin film transistor unit cells face the color filter unit cells respectively, and a liquid crystal layer is disposed between the thin film transistor unit cells and the color filter unit cells;

applying a test driving signal to a plurality of liquid crystal display unit cells via a non-contact method to inspect the liquid crystal display unit cells, each of the liquid crystal display unit cells including a thin film transistor unit cell, a color filter unit cell facing the thin film transistor unit cell, and the liquid crystal layer;

separating each of the liquid crystal display unit cells from the assembled substrate; and

assembling a driving module with the liquid crystal display panel to form a liquid crystal display panel assembly, the driving module driving the liquid crystal display panel.

2. The method of claim 1, wherein the liquid crystal aligning member is formed by:

forming an alignment film comprised of an alignment material having a carbon-carbon double bond; and

irradiating an atomic beam onto the alignment film at a first angle with respect to the alignment film to transform the carbon-carbon double bond into a carbon-carbon single bond having a polarized functional group, and the first angle being substantially equals to a pre-tilt angle of liquid crystal molecules of the liquid crystal layer.

3. The method of claim 2, wherein the atomic beam is irradiated onto the alignment film such that the atomic beam forms an angle in a range from about 0° to about 90° with respect to the alignment film.

4. The method of claim 3, wherein the alignment material is any one selected from the group consisting of diamond-like-carbon (DLC), SiO_2, Si_3N_4 and TiO_2.

5. The method of claim 1, wherein the assembled substrate is formed by:

forming a fence on one of the thin film transistor unit cell and the color filter unit cell;

filling the liquid crystal layer in a space defined by the fence; and

assembling the first mother substrate and the second mother substrate.

6. The method of claim 1, further comprising:

applying a first light to the first mother substrate, the first light passing through the first mother substrate, the liquid crystal and the second mother substrate to be transformed into a second light;

detecting the second light to obtain unit cell data, each of the unit cell data containing a first image information of each of the liquid crystal display unit cells; and

comparing the liquid crystal cell data with reference data to detect an unfilled region where the liquid crystal is not filled, the reference data containing a second image information of the liquid crystal display unit cell having no unfilled region.

7. The method of claim 6, wherein the second light is detected by a charge coupled device (CCD) camera.

8. The method of claim 6, further comprising:

exposing the assembled substrate at an atmospheric pressure for a predetermined time when the unfilled region is detected.

9. The method of claim 1, wherein the liquid crystal display unit cell is examined by:

applying a photoelectro-motive force as a test driving signal to each of the liquid crystal display unit cells;

applying a test light to the liquid crystal display unit cell, the test light being transformed into a test image while the test light passing through each of the liquid crystal display unit cells; and

inspecting the test image to examine a display quality of each of the liquid crystal display unit cells .

10. The method of claim 1, wherein the photoelectro-motive force is formed by:

applying a first light to a gate line formed in each of the thin film transistor unit cells to generate a first photoelectro-motive force; and

applying a second light to a data line formed in each of the thin film transistor unit cells to generate a second photoelectro-motive force.

11. The method of claim 10, wherein the photoelectro-motive force is formed by further applying a third light to a common electrode formed in each of the color filter unit cells to generate a third photoelectro-motive force.

12. The method of claim 10, wherein the first photoelectro-motive force is higher than a threshold voltage of a thin film transistor connected to the gate line.

13. The method of claim 9, wherein the test image is inspected by:

detecting the test image to generate test image data; and

comparing the test image data with reference data.

14. The method of claim 13, wherein the test image is inspected by a charge coupled device (CCD) camera.

15. The method of claim 1, further comprising:

attaching a first polarizing plate on the first mother substrate; and

attaching a second polarizing plate on the second mother substrate, the first polarizing plate and the second polarizing plate being attached after examining the liquid crystal display unit cells.

16. The method of claim 1, wherein the first and second mother substrates are erected to be disposed parallel to a gravitational force direction and transferred so as to manufacture the liquid crystal display device after the thin film transistor unit cells and the color filter unit cells are formed on the first and second mother substrates, respectively.

17. The method of claim 1, wherein an edge of each of the liquid crystal display unit cells is cut by a laser beam, so that the liquid crystal display unit cells is separated into each of the liquid crystal display unit cells .